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Never Feed Them After Midnight 4

A stylishly quirky master of the cult film, director Joe Dante took a giant step forward into mainstream filmmaking with *Gremlins*, a savagely witty fairy tale and resounding boxoffice success. To an extent beyond that of any recent film, *Gremlins* relied almost as much on its variously conceived mechanical creatures as it did on its live performers. With contributions from Joe Dante, producer Michael Finnell and others, mogwai and gremlin creator Chris Walas unveils the story behind the year's most remarkable cinematic newcomers. *Article by Paul M. Sammon.*

Across the Eighth Dimension with Buckaroo Banzai 44

Overflowing with bizarre concepts and off-the-wall humor, *The Adventures of Buckaroo Banzai* demanded an equally off-centered approach to its visual effects. With this in mind, effects supervisor Michael Fink was given the task of organizing and coordinating the activities of three separate facilities, all engaged in providing footage of organic spaceships and interdimensional environments. With an overview by director W. D. Richter, Fink elaborates on the project, with additional input from Hoyt Yeatman and Keith Shurtle of Dream Quest Images, Peter Kuran of VCE, Inc., and John Scheele of Greenlite Effects. *Article by Nora Lee.*

What Dreams Are Made Of 60

Creating a low-budget dream world was often a nightmare for the effects personnel involved in *Dreamscape*. Visual effects supervisor Peter Kuran details the creation of surrealistic nuclear explosions and post-holocaust environments; special makeup artist Craig Reardon outlines the construction of a full-size snakeman and various radiation-burned bomb victims; and cameraman James Aupperle discusses his stop-motion animation in the film. *Article by Adam Eisenberg.*

FRONT COVER — Gizmo, the cuddly pet whose offspring create havoc in *Gremlins*.
An incarcerated mogwai in the school science lab in *Gremlins* — BACK COVER.



Never Feed Them After Midnight

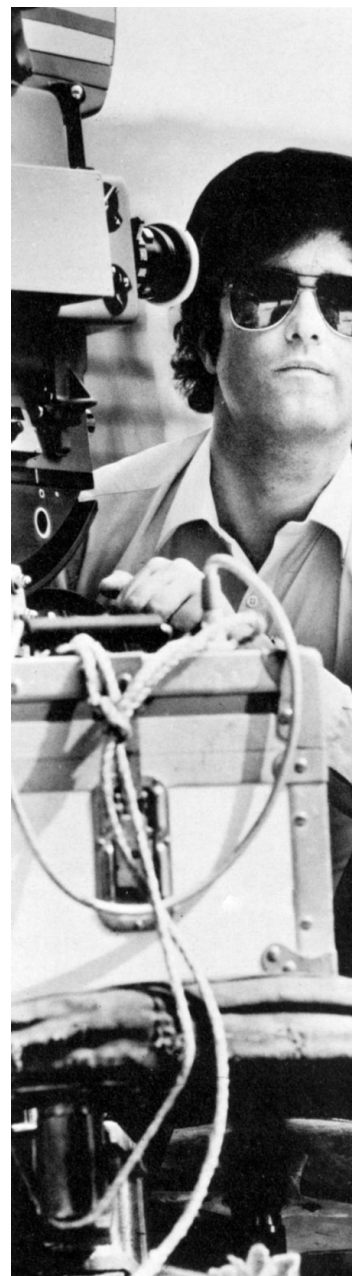
Unknown to either, both Walas and Dante attended the same high school in Parsippany, New Jersey. In 1975, Walas entered the film program at Los Angeles City College and, two years later, joined the Don Post Studios as a painter. After leaving Post and working on effects makeup for several television shows, Walas teamed up with Dante on *Piranha* — the director's second credit — on which he worked with the effects team. Since then, Walas has contributed makeup and other effects to such films as *Scanners*, *Caveman*, *Dragonslayer*, *Raiders of the Lost Ark* and *Romancing the Stone*.

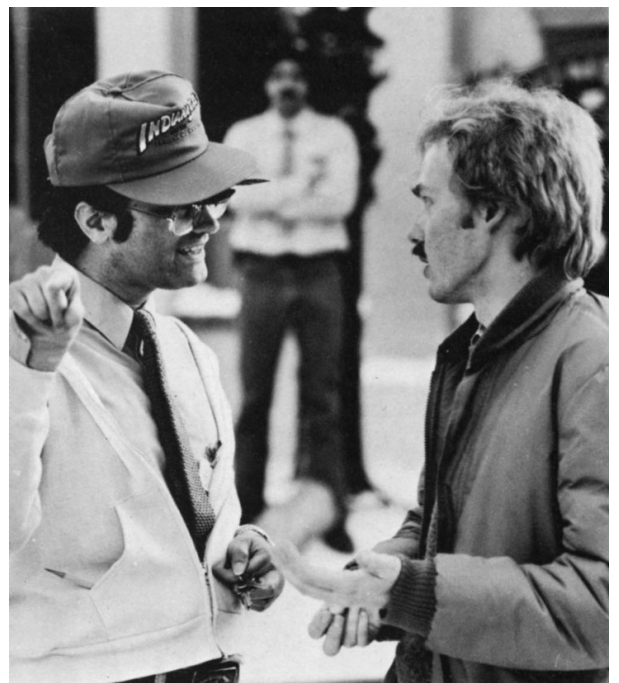
"Gremlins," said Walas, "seemed so intriguing a challenge that I snapped it right up. Very fortunately, for a project of this scope, Mike and Joe kept me involved in every step of the process, from the moment I received the second draft screenplay — which was in early 1982 — to the final cut. From the effects end, the scope of the picture was awesome. I turned pale when I read lines like: 'Hordes of gremlins — thousands and thousands of them — pour through the town.' And the creature nomenclature was a little confusing, too. In the script, they were just called mogwai all the way through. To keep things straight, we started calling the nice little furry ones mogwai and the mean nasty ones gremlins. In fact, to simplify it even further, our own crew got to calling the mogwai MGs and the gremlins GMs."

Despite his initial apprehension at the effects-heavy aspects of *Gremlins*, the Marin County-based Walas agreed to participate in the project. Meanwhile, back in Los Angeles, Joe Dante was beginning to prep the picture while still shooting his *Twilight Zone* episode. "Steven's original idea for *Gremlins* was to do it as a very low-budget, non-union film at the Osmonds' studio in Utah. For varying reasons that didn't work out. One was that I didn't want to do it on location; and two, once we got Chris Walas involved, it became obvious that the special effects were going to be more expansive and the picture more expensive than Steven had hoped. We then all realized that we were going to need studio backing in order to make the film. Just exactly how *Gremlins* got to Warner Brothers I'm not really clear. I would imagine it had something to do with our doing *Twilight Zone* there. But even though Warners was interested in developing the picture, they were a little recalcitrant about putting out the money up front. We never really got a green light on *Gremlins* — more like yellow-green. It was okay to build the sets, but it wasn't okay to hire the cast. It was okay to hire this person, but not that person. *Gremlins* got its go-ahead in dribs and drabs. Once it finally did, though, Steven and I and Chris Columbus and Mike had changed the focus of the script, from being a 'B' horror movie into something different. Unfortunately, I can't tell you exactly what that 'different' is."

"What really closed our deal with Warners," said Finnell, "was some test footage that we shot of one of Chris' first gremlins. That's the look at that in January of 1982 and then the 'Wall

From a vantage point on the camera boom, director Joe Dante surveys his domain. / Dante confers with producer Michael Finnell, a longtime collaborator. / With only minor deviations, Gremlins was shot entirely on studio soundstages and backlots. For Christmastime in the fictitious community of Kingston Falls, the Universal town square was dressed with simulated snow and ice, and enlarged via a Rocco Gioffre matte painting which filled in some of the foreground and all of the areas beyond the main street. Additional background trees were











tinued, "Joe and I had had some storyboarding experience with *The Howling*, so we decided to storyboard as many of the *Gremlins* effects sequences in advance as we could. In fact, we began boarding *Gremlins* while we were still shooting *Twilight Zone*, because there was no way Chris could even begin building certain puppets until he had storyboards. In some shots, we might need a gremlin from the waist up only, while in others there might be a full, free-standing creature in the frame. Each would be very different in terms of its construction. So *everything* was built to storyboard. Of course, we had a certain amount of flexibility to change these boards as we went along; but at least Chris had, in the beginning, a good firm idea of what we needed so he could go ahead and start building things." The first *Gremlins* storyboards were actually produced by Joe Dante, who had trained as a cartoonist early in life. (One especially telling panel featured a mogwai standing in a crate labeled 'One (1) Acme Mogwai - Made in Taiwan.') Dante was later superseded by storyboard artist David Negron, who illustrated the bulk of the picture during preproduction. Dick Lasley — a *Poltergeist* veteran — then joined the production, providing boards for the duration of the show and working closely with production designer James H. Spencer.

At the same time *Gremlins*' action was being graphically laid out, Joe Dante was finding the relationship with his executive producer to be a pleasant one. "I had heard some rumors about the Spielberg/Hooper situation on *Poltergeist*," Dante commented, "and frankly I had some trepidation about it, because nobody wants to make a picture for someone who should really be making it himself. But my fears were groundless. Once we finally had the script honed down and Steven approved the two leads, he seemed much more involved in *Indiana Jones*. In fact, just before he left the U.S. to shoot *Indiana*, the last thing he said to me was: 'Go ahead. Make the picture. It's your picture. Don't even show it to me until you think it's finished.' Now, even Roger Corman never said that to me! And that's exactly what happened. Steven was on the set only once, for two days, when Harrison Ford hurt his back on *Indy* and they had to shut down for a couple of weeks. Other than that, Steven never even looked at the film until we had about a two-hour rough cut to show him."

By now the *Gremlins* script had been made much more humorous, with a heavy peppering of Dante's trademark in-jokes. The character of the gremlins, too, had been softened, with their actions now motivated more out of an urge for dangerous fun than sheer hungry viciousness. For Chris Walas

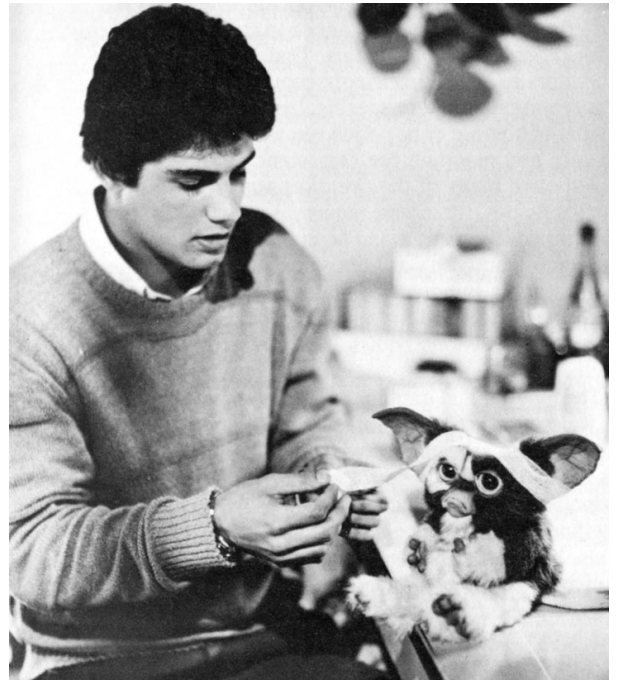
Billy Peltzer, the new pet in The mogwai sinister alt gremlins - and operatic team of m people, he Walas. / G first appearance Peltzer has an ornate new family cable-operated sections to achieve the Wiley, a classic the mogwai examines



tinued, "Joe and I had had some storyboarding experience with *The Howling*, so we decided to storyboard as many of the *Gremlins* effects sequences in advance as we could. In fact, we began boarding *Gremlins* while we were still shooting *Twilight Zone*, because there was no way Chris could even begin building certain puppets until he had storyboards. In some shots, we might need a gremlin from the waist up only, while in others there might be a full, free-standing creature in the frame. Each would be very different in terms of its construction. So *everything* was built to storyboard. Of course, we had a certain amount of flexibility to change these boards as we went along; but at least Chris had, in the beginning, a good firm idea of what we needed so he could go ahead and start building things." The first *Gremlins* storyboards were actually produced by Joe Dante, who had trained as a cartoonist early in life. (One especially telling panel featured a mogwai standing in a crate labeled 'One (1) Acme Mogwai - Made in Taiwan.') Dante was later superseded by storyboard artist David Negrón, who illustrated the bulk of the picture during preproduction. Dick Lasley — a *Poltergeist* veteran — then joined the production, providing boards for the duration of the show and working closely with production designer James H. Spencer.

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categorize most of the people on the set. I tried to give everybody a chance to take on different responsibilities. That he was an operator as well. Surprisingly enough, the operating requirements were specifically a matter of how big or how wide you were, how they fit into and maintain the consistency of the scene.

Although many of the *Gremlins* puppets were bodied figures, there were numerous other body segments that would be in the frame and crew worked up a 'library' of molds from literally hundreds of molds — a 'library' of molds, always on call for any situation. There were various bodies, heads, faces, teeth.

The mogwai and gremlin parts were made at Walas' northern California facility, then shipped to Los Angeles and assembled on-site in a 45-foot mobile storage and workshop area. "I did the principal photography," said Walas, "and I used the methods to operate the mogwai and gremlins, rods, handwork, marionetting, cables, 'em-across-the-room' puppetry. Whenever we tried to use our cable operating system, we got better results in subtleties of control. This, Gary Platek came up with a very quick-change hand control system that worked well. They attached and detached in a matter of only about the size of a book. They really were levers used in cable control systems, were three feet tall and lined up side by side with four levers apiece — which takes up a lot of space. The creature movements, we'd all sit down and do little performances, just to get the timing down. Once we had a smooth control, then we went for the little character work."

With the *Gremlins* puppet construction, Dante's thoughts turned to visuals. His inspiration — *The Howling* and "It's a Good Life" — was visualized, due in no small part to John Ho, who constantly moving camera and odd, tilted a near-expressionistic surface to both be presented no differently. Dante's inspiration in film with not only the spirit of Chuck Jones, but also with the *anima* of the director Mario Bava, an assured stylist who clearly — at least in the visual sense — has a kinship with Dante's later works. "In *Gremlins*," Dante said, "it seemed to me that the film was a story which, even at the

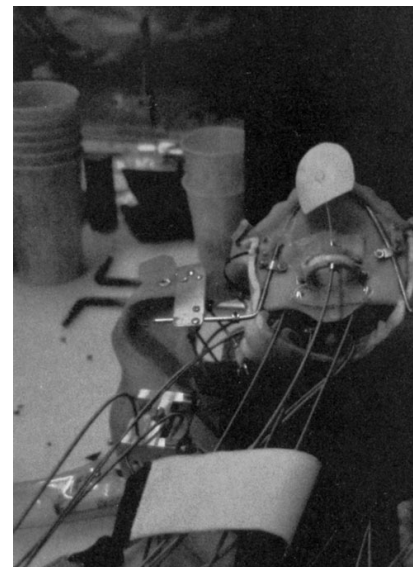
In addition to the properly-scaled mogwai puppets, three oversize heads — each about ten inches tall and more than a foot wide — were constructed for closeups. Brent Baker runs latex skins for these mogwai 'superfaces.' / Exposed mechanics for one of the closeup heads. Thirty-six cable-actuated mechanisms afforded the large-scale mogwai faces a wide range of fluid expressions. / On set, James Isaac makes repairs to the eye mechanism on a Gizmo closeup head. / Billy and his girlfriend, Kate Beringer, with Gizmo. To avoid the problems inherent in creating a walking mogwai, a radio-controlled Gizmo puppet was simply carried around either in the actors'

Another thing we did for that shot was to add three animated birds flying through the sky and some moving smoke coming out of one of the chimneys across the street. The birds were simply bipacked when we shot the painting so that they would register as dark silhouettes against the sky. The smoke, which was cotton on a rotating cylinder, was done on a separate pass and double-exposed over painted smoke coming out of the chimney."

"Working on the Universal town square set was a joy," said Dante, who remembered it as the setting for some of the 1950s' Universal horror movies he had devoured as a child. "In fact, I was looking at a trailer for *The Monolith Monsters* recently, and there was Kingston Falls." Unfortunately, the outdoor set also presented its share of problems. "About a week before we were to start filming at Universal," recalled Mike Finnell, "the crew of *Streets of Fire* suddenly began erecting all these tall poles and tarpaulins for *their* movie, right behind our buildings. That was a problem, because we couldn't shoot above the tops of our buildings and had to work around all those poles. John Hora was forced to go to a lot of trouble to hide that." Hora and Dante eventually skirted the problem of the eighty-five sixty-foot-tall poles and their connecting tarpaulins — now a permanent feature on the Universal Studio Tour and advertised as "The World's Largest Enclosed Set" — by rearranging most of their town square setups in an opposite direction from the distracting structures. Even so, a single supporting cable for one of these poles can be seen in the lower left-hand corner of Gioffre's matte, an element that the artist purposefully incorporated into the painting as a sly reminder of the complications.

Providing snow for the Kingston Falls setting — an unlikely natural phenomenon for Hollywood in mid-May — was an assignment that fell to *Gremlins*' veteran effects supervisor Bob MacDonald Sr. Born in 1912, MacDonald entered the film business as a teenager, working first with his father on M-G-M's silent version of *Mysterious Island*, then proceeding on his own through half a century of such genre landmarks as *Forbidden Planet*, *The Time Machine* and other Metro productions. "We used any number of different things for the snow in *Gremlins*," MacDonald explained, "including bringing snow-making and wind machines onto the set. Limestone stood in for snowbanks, we used a lot of gypsum sand for snow and we simply added flocking to many of the trees. For some of the trees that were in long shot, we even used the foam that's put on runways when an airplane's in trouble. But that would only hold for about fifteen minutes. Any longer and there would be bubbles popping all over the tree."

MacDonald found particularly enjoyable the wealth of opportunities Rand Peltzer's oft-malfunctioning inventions presented for innovative effects rigging. "The idea was that Peltzer was



















surgery and bleeding ulcers. Two, it's got Richard Carlson, a great grade-B Universal character actor from the Fifties. And three, it had a lot of good dialogue which counterpointed what was going on in *our* movie. Plus, it was directed by Frank Capra."

Leaving the biology teacher groping under his desk for the elusive creature, *Gremlins* switches back to the Peltzer home where a trembling 'max' puppet Gizmo is seen hiding in a motorcycle helmet, watching the as yet unseen gremlins hatching from their respective cocoons. Moments later, a helpless radio-controlled Gizmo is dangling from a dart board, prey to the gremlins' wicked missiles, until a grabber arm plucks him off the board. "We snuck this shot in while Mike Finnell wasn't looking," Dante noted.

Downstairs, alone in the house, Billy's mother (Frances Lee McCain) hears the strange noises above. In a scene reminiscent of *Psycho*, she slowly ascends the staircase to Billy's bedroom, butcher knife in hand. But the room is empty, save for the shattered cocoons. Another noise — this time from downstairs. Coming down the staircase, Lynn Peltzer is startled to hear a Johnny Mathis record asking 'Do You Hear What I Hear?' Switching off the phonograph, she suddenly hears a crash from the kitchen. Cautiously peering inside, she (and the audience) gets a first unobstructed look at a gremlin — bat-eared and beaded, its face smeared with the remnants of gingerbread men.

"The first GM you see in the kitchen was what we called our 'super gremlin,'" said Walas. "It was very heavy, and had fully mechanized arms and a full-range face that was a simplified version of a GM superface. The ears on that puppet — in fact, all of the full-range puppets — were cable controlled. I always thought that the ears were going to be a strong feature on these creatures; so whenever we could, we made sure that we mechanized the back of the head. Actually, we made only one GM superface and one Stripe superface. The Stripe superface could be put on any GM body we had available. This was helpful in case one of them got stepped on or dropped, which did happen."

Besides the 'super gremlin,' GM superface and Stripe superface, Walas' crew also produced a dozen different gremlin heads — including one radio controlled model — that could be mixed and matched as needed. But it is the GM and Stripe superfaces of which Walas was most proud. "They were quite an achievement, as far as I was concerned, because they had a really good range of movement. The mechanics were quite a bit different from the MG superfaces, and it took a good eight to ten operators to work them. The gremlin Frances first sees in the kitchen had



The master gremlin, fashioned in clay. Most of the sculpting requirements for Gremlins were handled by Randy Dutra and Anthony McVey. / Various gremlin underskulls, with built-in mechanics and accompanying skins. / A special plate-throwing gremlin was constructed around a mechanism similar to that used in launching clay pigeons for skeet shooting. The spring-loaded arm could be cocked, a plate placed in it and then released. / Stretched out on

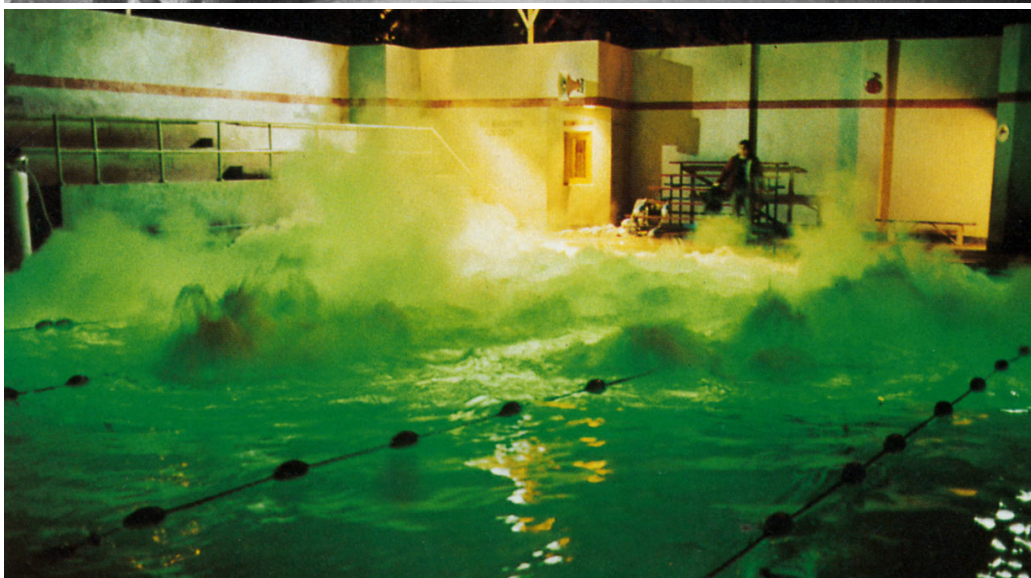
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parts are built up from machined alum strapped onto an operator's arm — so that his arm movements become movements. It's quite an involved process everywhere, and there was a lot of gear that was quite limited, but this one is a camera movement and is very, very fluid."

In addition to the kitchen sequence were employed in the shot where a light control box and later in Stripe's department store chase. Two sets constructed, as well as two 'super gremlin' cabling entered the bottom of the torso one free-standing torso with cables run. Operating a full 'super gremlin,' with both face, required a dozen operators.

Walas and crew were next responsible for one of the gremlins climbs up into the bowl in search of the cookie dough within. The bowl, a background shot, was accompanied by a marionetted puppet climbing out of the frame. Lynn Peltzer quietly a puppet whose head and arms are now buried in a half-puppet, with legs and torso only — turns the appliance on full speed. The result is a splattering chunks of gremlin flesh in the room. Ironically the blender is the only one in the entire film that seems to work.

"Our 'gremlin guts' were chopped up," said Bob MacDonald, "and the blood was made of a mixture of water and methacrylate — for when you peel it off in the motion picture industry is 'peel off' put wallpaper over it, it will peel right off. This mixture green with food dye. Getting the gremlin spinning around in the bowl over the kitchen was complicated, the puppet was tied onto a jointed rod that could not only whirl him around the bowl but also pull him down into the bowl. The bowl was a large cylinder with a hydraulic accumulator off an aircraft. We pulled the piston clear down to the bottom, locked it off, and then filled that empty space with the blood and guts. The last thing in the blender was metal elbows and eight solenoid valves at angles along the bottom of the bowl. The puppet rotating, raise up the piston and force the gremlin guts upwards, and it

we started with a five- by twenty-foot-long air storage chamber hooked up to a number of 1400 cubic feet per minute air compressors. From that, we had twelve inch-and-a-half air lines and another twelve three-quarter-inch air lines running out of frame down to the bottom of the pool. We painted those lines the same color as the pool, and of course the water turbulence also hid the fact that they were down there. Each of these lines had a heavy plated elbow welded onto the end of it, and on top of that we put these spider rigs that allowed air to come out in four different spots. By controlling what air went into each unit, we could randomly or in sequence control the disturbance all around the pool. And that water became *disturbed*. It sounded and felt like an earthquake. You could feel the vibrations through your feet fifty yards away. We also had eight lines running down into the pool bottom that were connected to individual bottles of liquid nitrogen. This not only enhanced the agitation but also condensed the moisture in the air, producing dense clouds and steam. In addition to what we did, the electrical department littered the bottom of that pool with different light sources. There were waterproofed and gelled 10K lamps down there, as well as some old #2 Photoflash bulbs that John Hora had set off intermittently for a real interesting effect."

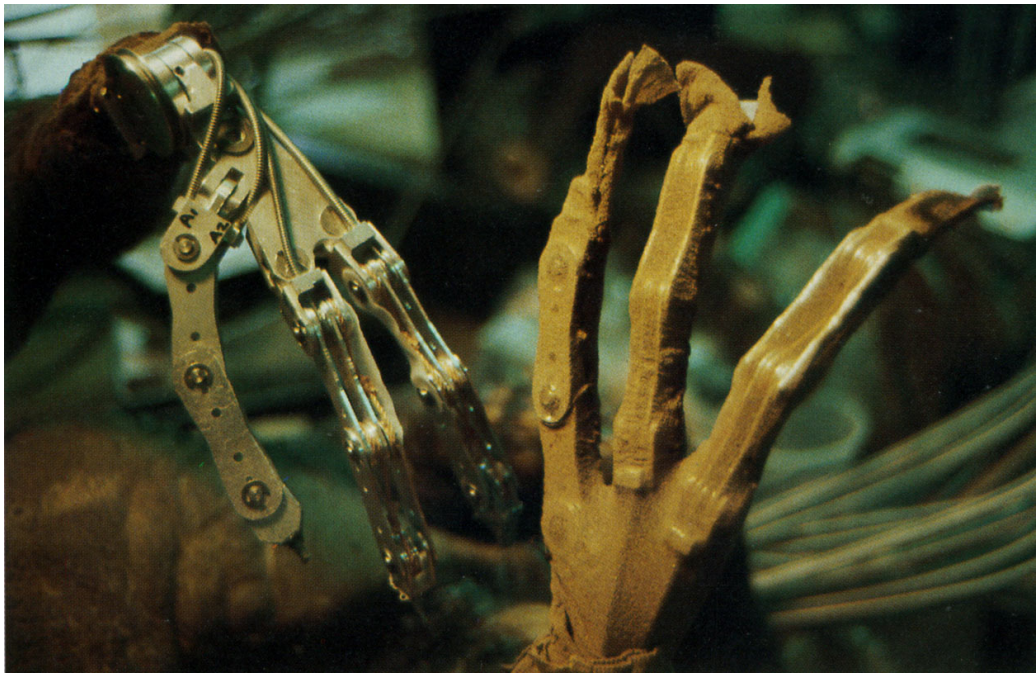
"Another aspect of the pool scene," Hora added, "was the use of variable frame rates — which we employed throughout the picture. After *The Howling* and *Twilight Zone* and *Gremlins*, I feel like I've gotten a lot of experience at that. On all three films, I've done filming well above or below the standard 24 frames per second. In fact, for some shots, I'd be shooting at 24 frames per second, and then vary the rate *within* the shot. For example, after Billy comes running out of the YMCA, there's a bunch of flickering lights behind him that intensify in their rate of movement as soon as he leaves the frame. We accomplished that by shooting Billy at 24 frames per second. Then, as soon as he was out of the picture, we slowly dropped to 16 frames per second and then to 12. We did the same thing with the boiling pool."

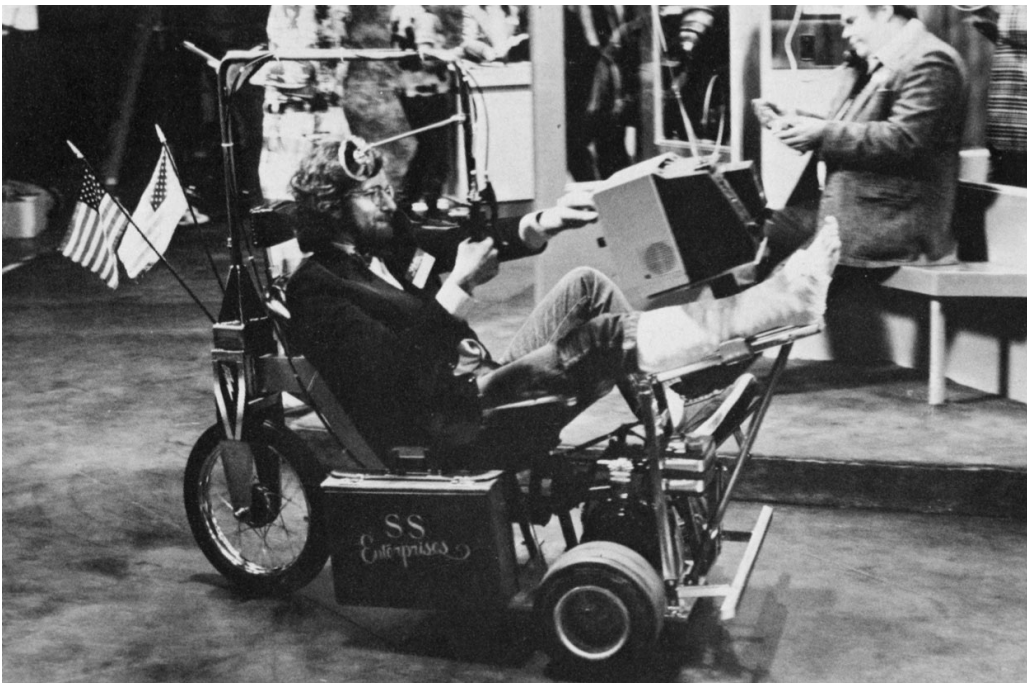
If Kingston Falls originally had a nuisance problem, it now was under siege as what seems to be hundreds of newly born gremlins come hopping and leaping down the town's main street — an effect achieved via stop-motion animation. "One of my original ideas had been to do *all* of the *Gremlins* effects with stop-motion," recalled Dante. "But then sanity prevailed and I realized that this method probably would've taken twenty years. So I settled for one stop-motion shot instead."

For this single shot, the *Gremlins* production crew turned to stop-motion veteran Peter Kleinow of *Fantasy II*. After signing on to the project, Kleinow first spent some time working directly with Walas' gremlin unit in San Rafael — on the mechanics for specially rigged gremlin feet with bendable toes — before turn-

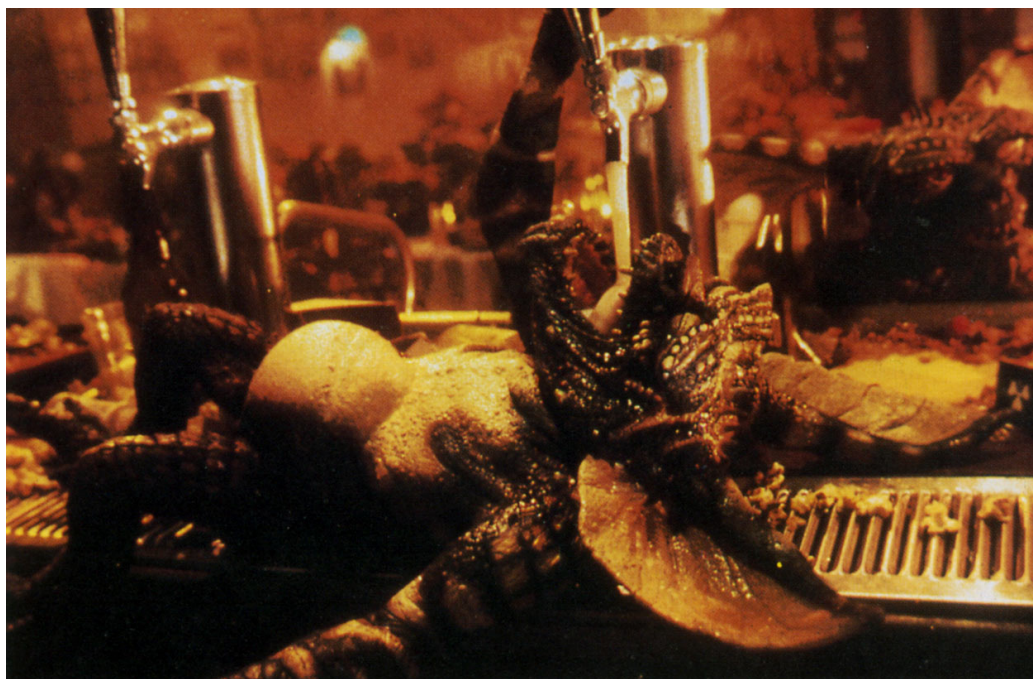
Sculptor Randy Dutra at work on one of the many different gremlin faces needed to achieve the full range of required facial expressions. / Airbrush in hand, Eric Norton wades through a pile of gremlins waiting to be painted. As a step-saving measure, body parts were run in tinted latex. / To produce the literally dozens of gremlin puppets required for the film, Walas' crew established an assembly line operation. / James Isaac at work on one of the two gremlin superfaces, fully-articulated with thirty-two cables and fourteen hand controls. / Hand mechanisms for the gremlin superarms. Stocking













him again."

"Everybody came up with ideas for the Finnell. "The grips, the effects crew, even list up on a wall and asked the crew if they thought they'd like to see the gremlin suggestions found their way onto the screen through them all, selecting those he liked."

Many were for actions never previously seen in creatures. The gremlin roustabouts ate real beer fed through tubes in the puppet's stomach bladders. (Many of the puppets in beer by the end of the sequence, a gremlin, with a full-range face and mouth, and a nose-picking gremlin were also highlighted.) Playing gremlins involved puppets with full-range faces. At one point, Strip shoots a card-cheater, an effect involving a prop firearm rigged by Bob MacDonald. This bit of frontier justice is the quick action of a puppet dressed as Joe Dante. Other gremlins played a *Star Wars* video game.

"Directing the operation of the gremlin to the process I used all the way through. "We had a system of reversible (mirror) for the operators, while I kept to a monitor the camera as possible. I would watch the crew's movements through the monitor all wearing. I then sorted out the people who thought best handled the puppet control for the tight closeups. I also tried to give as much as possible to the person operating the puppet. Timing was so critical on a lot of this: the bar, for example, of a GM blowing the operator did that with an air line that went into his mouth."

Another Dante improvisation resulted in bizarre images in the sequence — that with tiny sock puppets on each hand. Strip hopping up and down to the beat of the marionettes, developed by Jay Davis, was above frame. The gremlin seen break down his back, however, was not a marionette. In Los Angeles. A last-minute inspiration: the back-twirling puppet was shot in postproduction effort had officially wrapped.



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matte work. Dream Quest first shot two plates of the set over at TBS. That part was fairly simple. The size of that set was eight rows across and eight deep, so there were only sixty-four seats in all. We shot one plate for a close position, and then walked backwards twenty-two feet — which was exactly the same distance as the length of the grouping of seats there on the Burbank Studios sound stage — and set up our camera on high sticks and shot a back position of the gremlins, too. So now we had two distinct, spatially different shots that we could composite one in front of the other to make the theater seem twice as deep. In both positions, we allowed the gremlins to throw as much popcorn as they wanted to, because black velvet had been draped behind the seats, which led to the shot matting itself. We could allow the gremlin heads and popcorn buckets and handfuls of popcorn to be thrown right into the matte area. Then, in addition to the two center sections, we duplicated and optically repositioned the rear section to fill in the sides across the aisles. So now we had four sections of gremlins instead of just one. To add a little variety to that shot, we also shot a gremlin swinging on a rope against a small blue screen we have here at Dream Quest. The final element was a matte painting of the interior of the theater, which was done by Mark Sullivan." The painted area of the matte shot included the back wall of the theater and the projection booth, as well as right and left aisles running from the screen to the rear of the auditorium. A few background gremlins were also painted in. A 16mm projector was then pointed into a camera at Dream Quest and turned on. Shot in a mineral oil smoke environment, this footage was later laid in to the projection booth area of the painting, giving the illusion of smoky rays of light shining out from the booth itself.

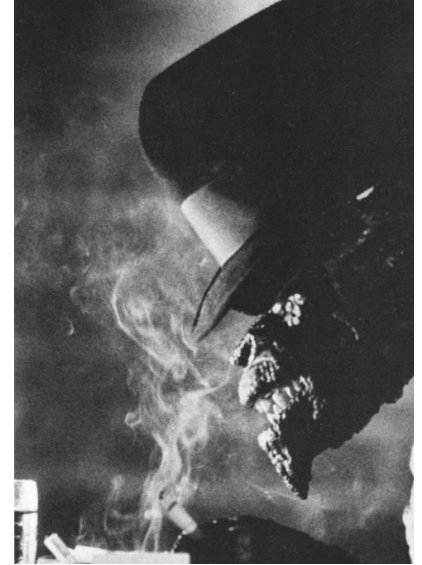
Outrageous behavior is the order of the day as the drunken gremlins run amuck in Dorry's Tavern. / A slouch-hatted gremlin conjures up film noir images. / In the back of the bar, other gremlins drink, eat popcorn and engage in a deadly serious game of poker. Puppet operators, for the most part, were concealed under tabletops and out of frame. / A 'flasher' gremlin featured a

Creeping behind the theater screen — with the Hansard double screen now in its rear projection mode — Kate and Billy are dwarfed by the classic Disney images looming behind them as they whisper out a plan to destroy the gremlins. Descending to the theater's basement, Billy opens a main gas line and ignites a slow-burning fuse to set off a timed explosion. However, as they cross behind the screen again on their way out of the theater, the film in the projector runs out, leaving two human silhouettes visible on the screen, which immediately alerts the gremlins to their presence.

The next shot, from the young couple's point of view, shows a horde of gremlins silhouetted on the screen. Though intended to look as though the creatures were rushing toward the stage, the imagery was actually rear-projected cel animation provided



matte work. Dream Quest first shot two plates of the set over at TBS. That part was fairly simple. The size of that set was eight rows across and eight deep, so there were only sixty-four seats in all. We shot one plate for a close position, and then walked backwards twenty-two feet — which was exactly the same distance as the length of the grouping of seats there on the Burbank Studios sound stage — and set up our camera on high sticks and shot a back position of the gremlins, too. So now we had two distinct, spatially different shots that we could composite one in front of the other to make the theater seem twice as deep. In both positions, we allowed the gremlins to throw as much popcorn as they wanted to, because black velvet had been draped behind the seats, which lead to the shot matting itself. We could allow the gremlin heads and popcorn buckets and handfuls of popcorn to be thrown right into the matte area. Then, in addition to the two center sections, we duplicated and optically repositioned the rear section to fill in the sides across the aisles. So now we had four sections of gremlins instead of just one. To add a little variety to that shot, we also shot a gremlin swinging on a rope against a small blue screen we have here at Dream Quest. The final element was a matte painting of the interior of the theater, which was done by Mark Sullivan." The painted area of the matte shot included the back wall of









lights, is *Gremlins*' last effects shot, another Dream Quest matte. "Our plate was shot at the Columbia Ranch, where they had done a little neighborhood area and dressed up the front of the Peltzer house," said Rocco Gioffre. "What we ended up doing was a high-angle shot, looking down on the road Keye Luke was walking on. We then masked off virtually everything else in the shot, painting in a curb in the road, all the houses to the left and the right, all the scenery in the background, the sky, the moon, moving clouds, winking Christmas tree lights — everything!" Painted on a three- by five-foot piece of masonite — with a small painted black area left blank for the eventual compositing of the live-action plate — the final *Gremlins* matte was assembled in about four camera passes. "In addition to the live-action plate and the matte painting, we also performed two passes for moving clouds that involved matting the same painting back onto itself. The moon was added on a separate pass, and we actually had a little glow pass to make the moon look as if it had a halo around it. Finally, we burned in the Christmas tree lights."

August 3rd marked the end of principal photography. During this period, the first unit had averaged eight or nine setups a day. "A far cry from my best Corman days when I'd get thirty to forty a day," Dante lamented. The event was not much cause for relaxation, however. "Immediately we went into Phase One of our postproduction period," said Mike Finnell, "when the majority of the creature scenes were photographed, from August 4th to the 12th. We shot for that week in the department store set, because it was going to be struck soon. Then, from August 15th through September 5th, the production was on a hiatus. This gave Chris Walas and his crew a chance to clean up and ready all the puppets. Phase Two, when most of the gremlins were filmed, went from September 6th through October 21st. Our final phase came from October 24th to November 1st, with a very small crew getting in a lot of tight shots."

"Interestingly enough," supplied Dante, "one of the most critical problems we had during postproduction was one of focus. This was because of the way we lit our sets. Every creature had to be on its mark. If an operator's arm got tired or moved one inch, the take was ruined."

One-and-a-half million dollars — the same price Carlo Rambaldi had charged to construct *E.T.* — was eventually spent on the entire creature effects budget for *Gremlins*. "We were originally budgeted at \$1.3 million," said Walas. "But given the subsequent reshoots and a couple of inserts Joe decided he needed, we deviated just a little from that."

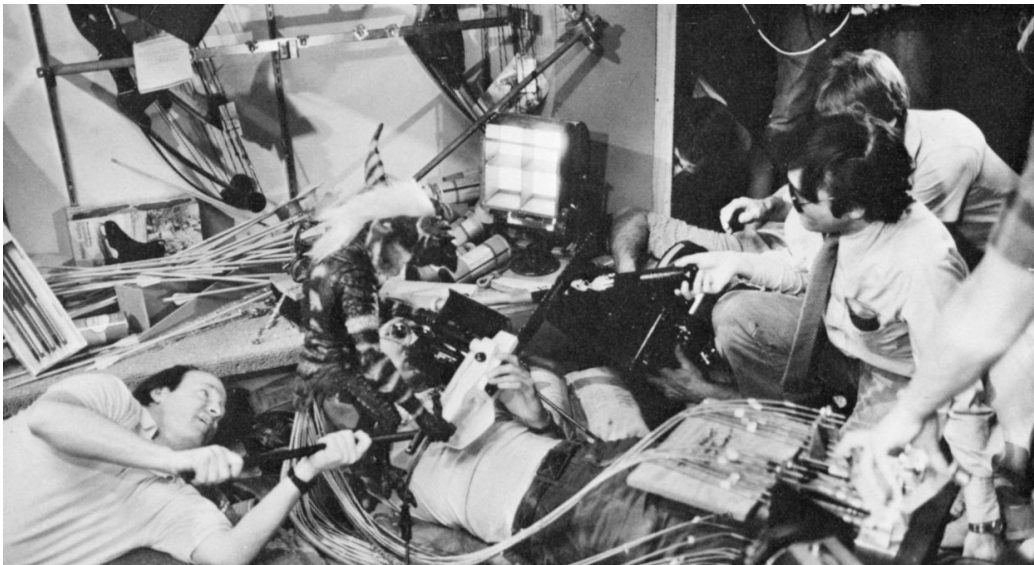
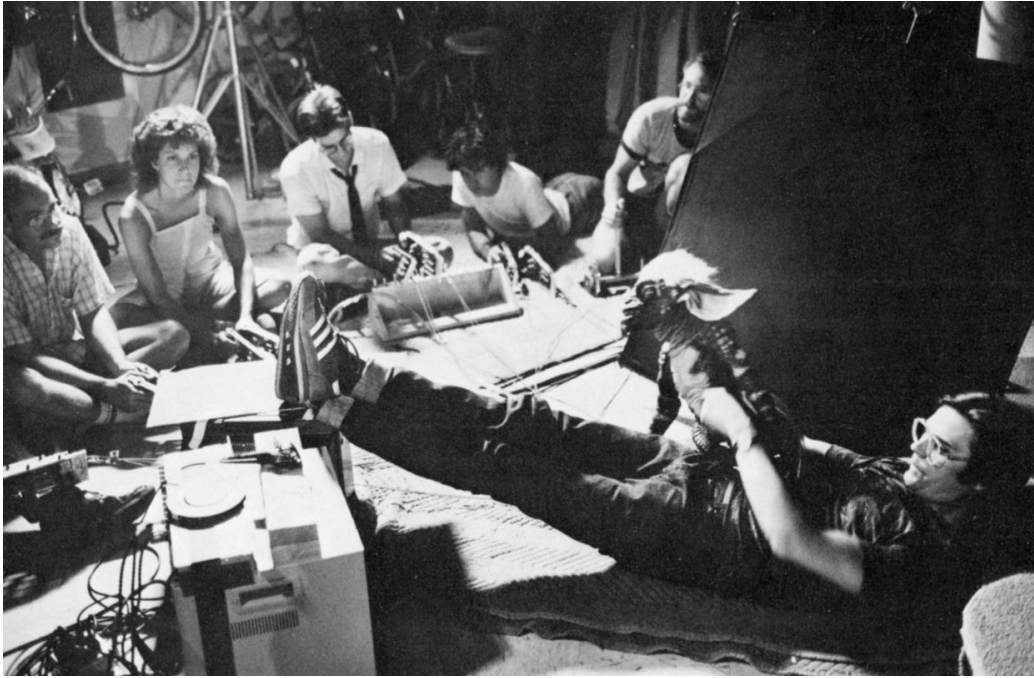


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by the gremlin 'flasher,' and during the 'microwave' and 'mixer' encounters), as well as hyena laughs and red fox sounds — the latter mixed in with Howie Mandel's words to create Gizmo's voice.

"Mark must have recorded every animal known to man," said Dante, "and while we were in postproduction, he'd send over little effects tapes that I'd listen to on my Walkman stereo while we were shooting. The crew got curious about this—nobody knew what I was listening to — so one day, John Hora came up to me and asked, 'What is that?!' I didn't tell him, just put the earphones on his head. He listened for a little while, nodding his head to what was probably backwards baby belches. Then he said, 'Oh well, I prefer classical.'"

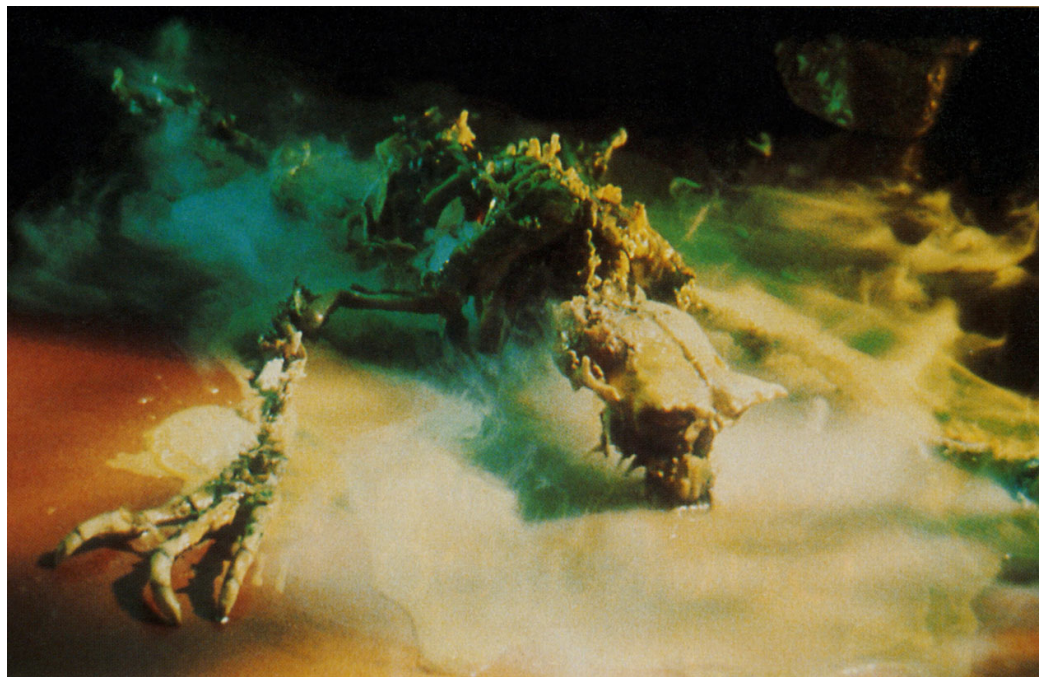
One of the final gremlin sound effects came after the first *Gremlins* sneak preview in San Jose, California. After the preview, it was decided that one last insert, of Gizmo in the department store greenhouse looking at a shade and realizing that light could kill Stripe, would be filmed. Steven Spielberg then came up with the phrase 'light-bright,' which Gizmo would utter in the new scene. The phrase was likewise incorporated into some of the film's earlier segments. Spielberg had another comment, as well. "After first seeing the rough-cut," Dante remembered, "Steven turned to me and said, 'It's your greatest work.' So I looked back at him and asked, 'Yeah — but is it any good?'"

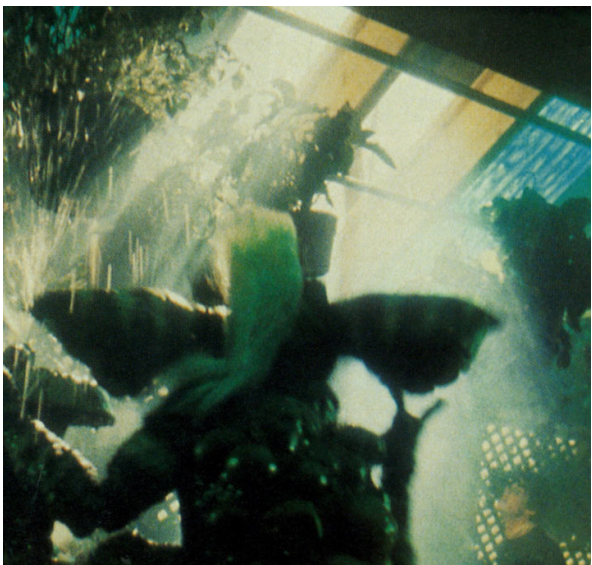
"We came in on time and under budget," commented Michael Finnell, "but we were working on *Gremlins* right up to its release date. Most of that last time period was spent in dubbing and trimming back the final print from approximately two-and-a-half hours to well under two hours in length." In fact, audiences attending the national sneak preview saw a slightly different version of the film than the one released widely on June 8, 1984. Several shots were altered or deleted, two minor subplots were jettisoned and the running time was reduced from 111 to 106 minutes. *Gremlins* opened to rave reviews in such magazines as *Time* and *Film Comment*. Most of the remaining critics were also positive, although a few were put off by the film's stylization, cartoonish heritage and violence. Regardless of how one felt toward the film's aesthetics or dramatics or licensed appurtenances, *Gremlins* remains one of the heaviest live-action special effects films in cinema history. Curiously, this aspect of the film (and the sheer hard work needed to attain it) escaped critical notice. "People really don't understand how many effects there are in this picture," said Dante. "But that's fine. You want people not to think they're watching effects; you want them to think they're watching some sort of reality."

After *Gremlins*, what? Will Joe Dante move away from a career studded with high-tech effects and turn to, say, a simple domestic drama? "No," said the director, already at work on his next

Brandishing a gun, Stripe holds Billy at bay while reveling in the regenerative waters of a garden shop fountain. / Gremlin puppeteers at work on the fountain sequence. / Actor Zach Galligan had no difficulty in conjuring up the proper emotional response to Stripe's most vicious attack — the bat-chewing chainsaw, though stringently safeguarded, was a real one. / A separate back section, implanted with inflatable air bladders, was attached to the Stripe puppet for scenes depicting the imminent birth of yet another plague of gremlins. / Gizmo saves the day by exposing Stripe to sunlight, thus destroying the nasty creature before it can complete the regeneration





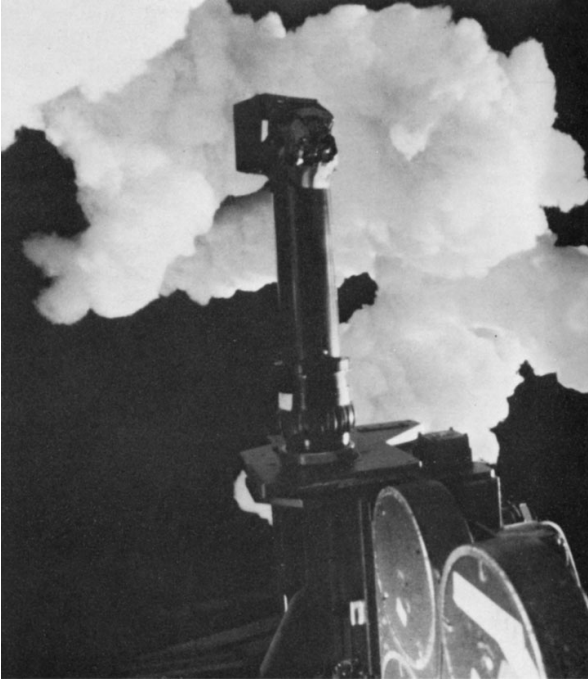


A blue-toned image of a cactus, possibly a cholla, with a bright, glowing light source near its base and a jagged lightning bolt striking down in the background.

Across the Eighth Dimension with
Buckaroo Banzai







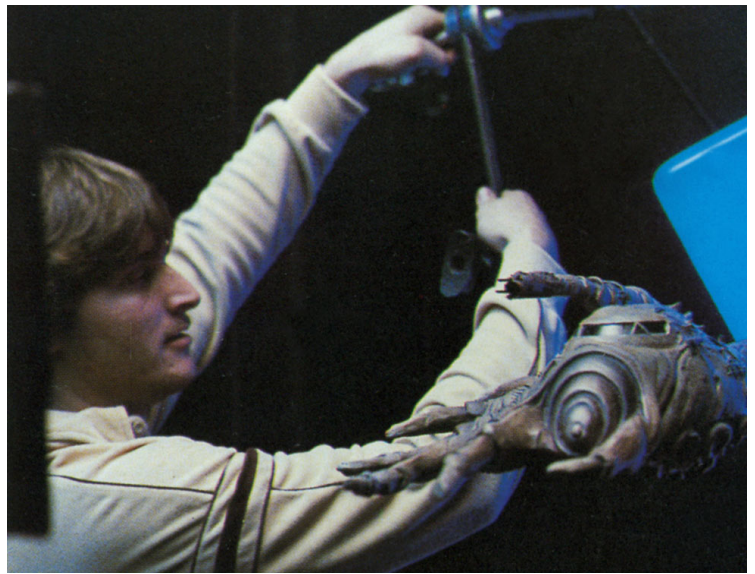
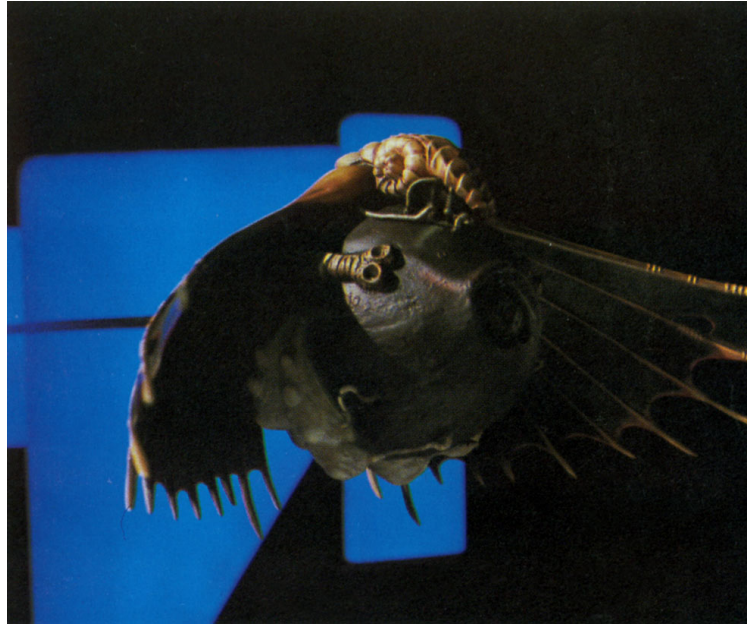
Yoyodyne facility. He has a tractor beam that comes out of the ship, which supposedly is going to dissolve the wall and he will fly through into the eighth dimension. It malfunctions, however, and he ends up ramming his way through. Mark Stetson and his group built two Lizardo ships. One was used for motion control and had several mounts and little lights in it. The other had just a rear mount. Its sole purpose was to smash through the wall."

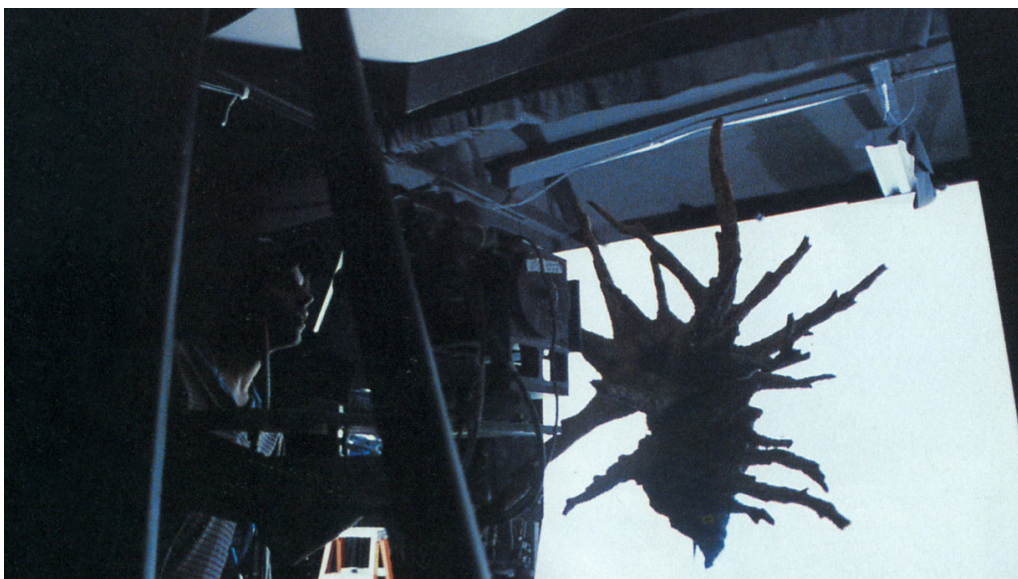
Mark Stetson also designed the breakaway wall, deciding in the process that in order to get the most realistic look, it should be constructed much the way a real wall would be. Individual bricks were therefore fashioned out of a dense twelve-pound urethane foam, then laid together with a clay slip developed by Mike Hosch. When the wall was finished, Hosch and Dave Schwartz washed it down with the clay to give it a more integrated look, and Ron Gress painted it. Hosch and Kevin Ross also built a test wall so that Dream Quest would be able to test camera speeds, the look of the debris, and ship speeds before attempting the real thing.

"We hired Richie Helmer to do the physical effects portion of the shot," Yeatman recalled, "and he is excellent. We made a thirty-foot track on a table top that we built outside in the parking lot. We got some small rails from Apogee, and we mounted the ship on a little DC servo cart that would get up to about thirty miles per hour. It would really cook down this track. At the far end, where the wall would be, was a rubber tire which was used as a bumper. We had a little pipe rig holding the Lizardo ship, and we'd get this thing positioned at the back of the track, and it would come screaming down and go 'smasho' into the rubber tire. Then it would *tttwwaanngg!*

"Still, we knew that we would have to have a test wall. If we had only one chance to get the shot, we couldn't do without a test wall. So Mark Stetson built one out of the same materials. We ran several tests to find the best speeds, and at the end of the track we had dump tanks with debris and stuff in them. Just as the ship is breaking through the wall, we would fire the dump tanks with air mortars, which would blow out more debris and help break the wall. We had to figure out what kind of debris to put in and how much to put in, so we ran three or four film tests with no wall at all. We also needed to know how fast to go. We found that it worked best at about thirty miles per hour."

To give the feeling of scale, the crash was filmed at very high speed using a Bruce Hill camera that ran at about 240 frames per second. The shot was also covered from four other angles with cameras running at speeds of about 120 frames per second. "We put our test wall in place," continued Yeatman, "and tented the whole thing in black to make it dark. When it came through, you could not tell you were looking inside a tunnel or anything.





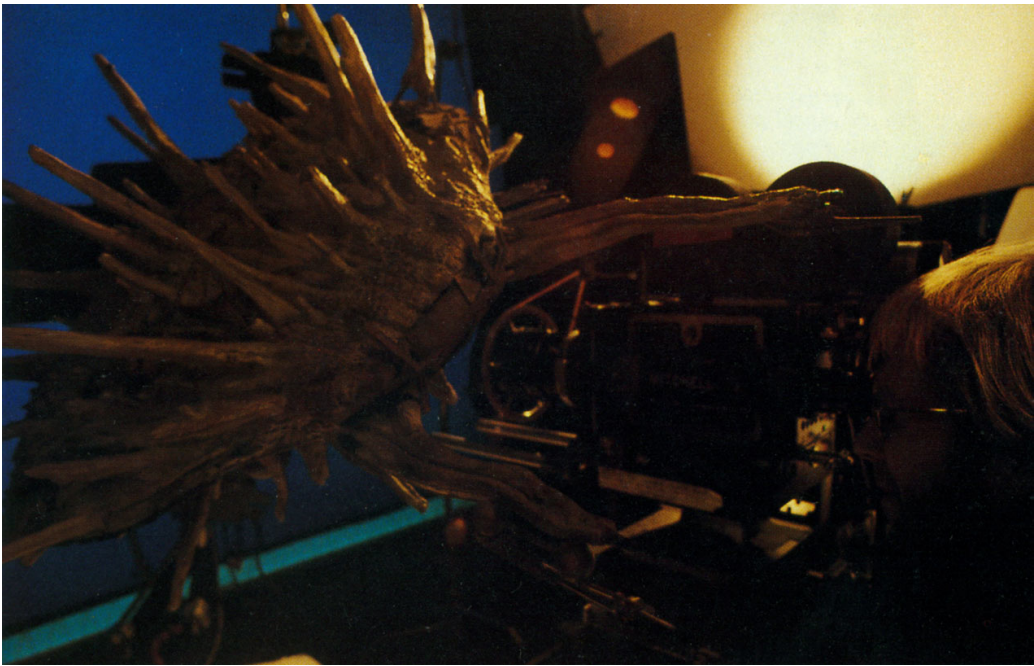
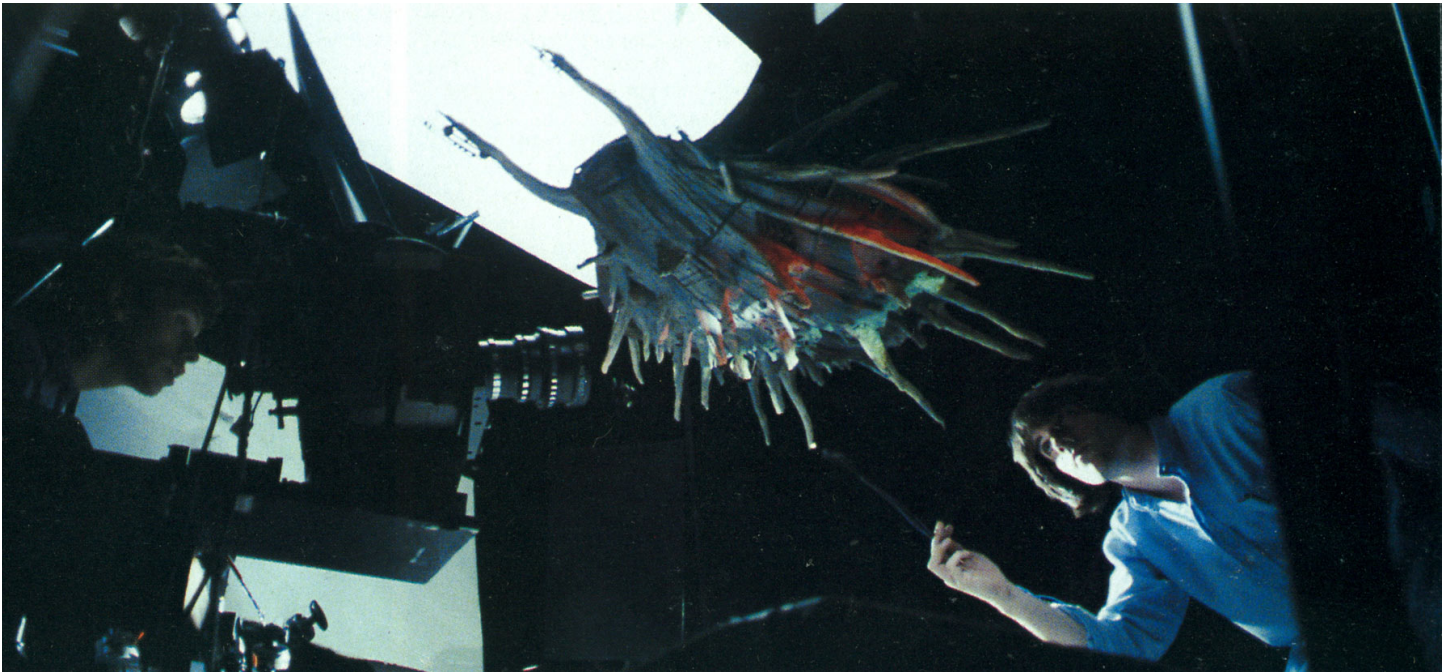
would get hit as the cart went by — but he fired himself. We looked at the film the few adjustments in speed and decided

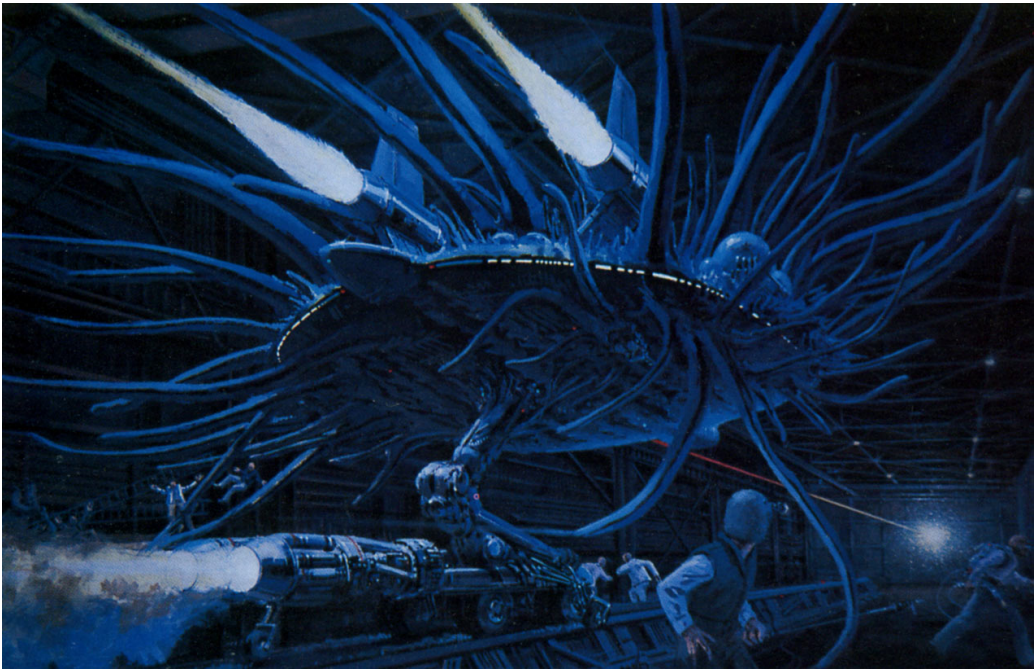
"So we brought out the real wall. It was the slightest push would break out the it was fairly windy on the parking lot. we had out there, just the difference in pressure and the outside air pressure enough to implode the wall. So we had to board over it and we used big flats to hold everything all ready, and then waited for the right position. There's something about the beat — so the only lighting we used was the sun and bounce boards. When the sun came at an angle, we rolled the cameras. The camera made this big racket. We yelled, 'Okay, start rolling down the track. Rich fired the dynamite and they blew all the stuff out. It happened so fast in real life — maybe you kind of wonder, 'Did it really work?' we saw the film that we knew for sure

True to form, the spiny ship design during the crash sequence. "Believe it or not, all those little spikes that had broken off the rest of the production proved to be a problem. We were afraid that one would break off during the crash and that you would be able to see it. We were shooting at high enough speeds to make it disappear. That would mean that the rest of the crash sequence was the last thing we did — wouldn't it? The main things we were looking for when we did the test wall was to see what would break off. Through, several spikes did break off. They were forced with steel rods and the smaller camera model so they wouldn't break during the crash. It might not have been necessary. I think it was a little bit tougher than the other one, but it crumbled away."

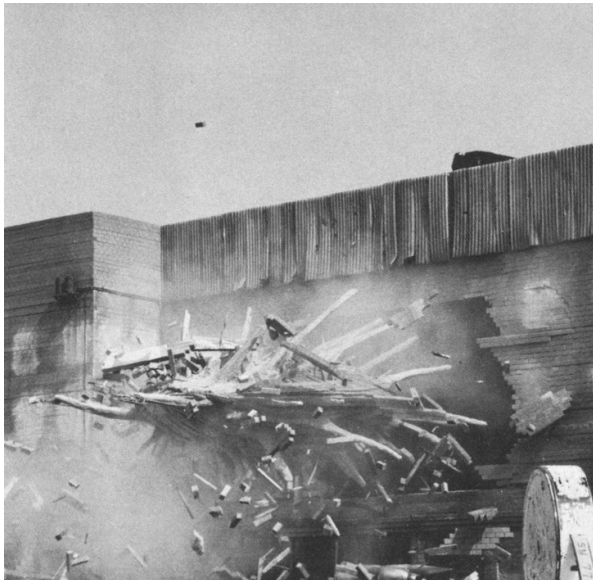
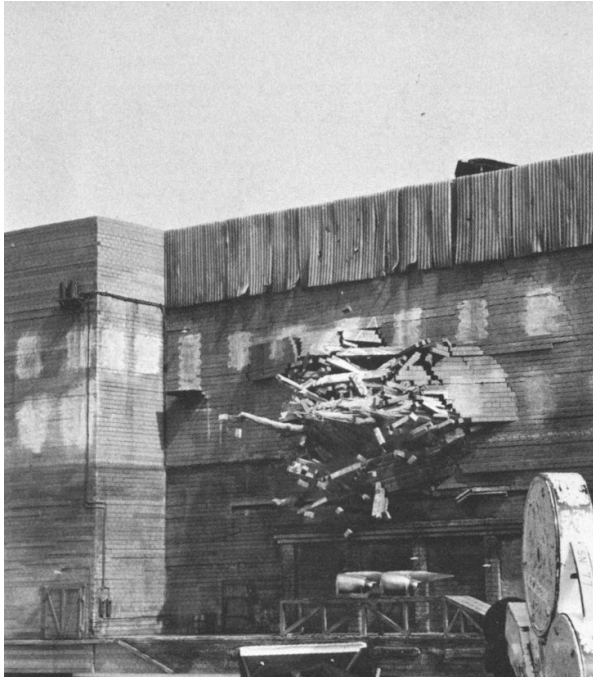
After Dream Quest finished its work, the company took care of the rest of the effects. The effects were supplied by various sources. One unexpected problem that about halfway through effects shooting, David Bretherton was replaced by Rich Kuran. Kuran had his own ideas about how the film should be shot when he had finished recutting the effect. He had some new and very interesting problems to solve. When the cry was heard: "Let them fix it!"

"Understandably," said Kuran, "most of the time, it's better to do simple things that pay better."







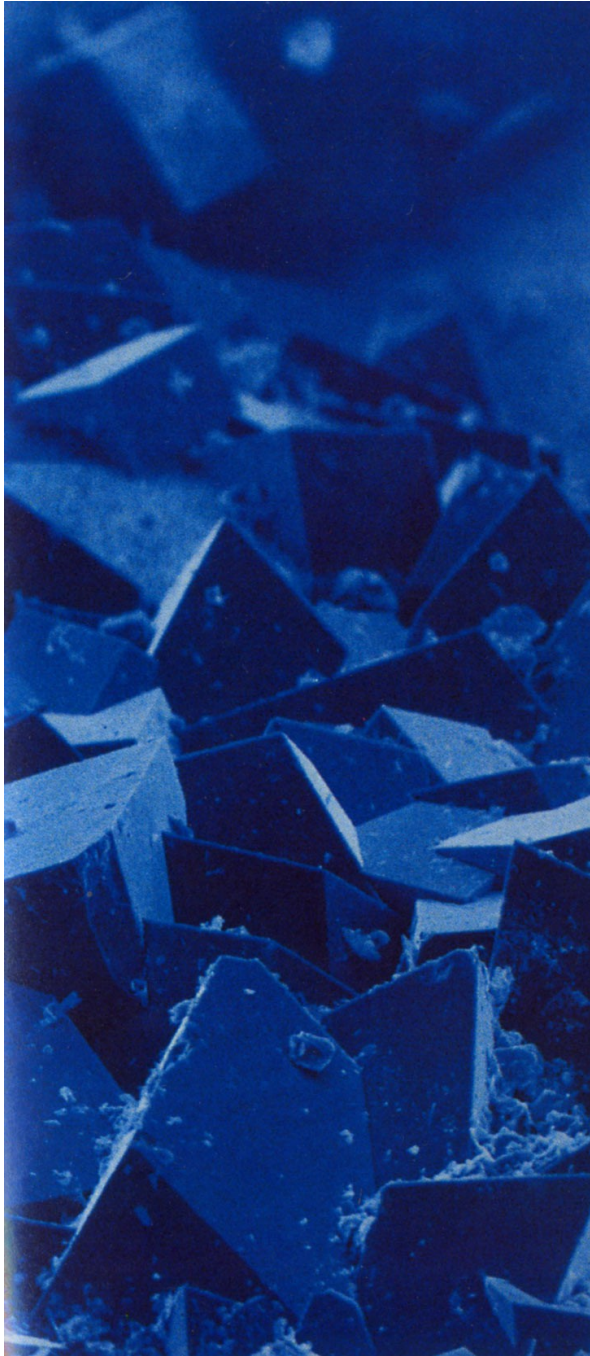


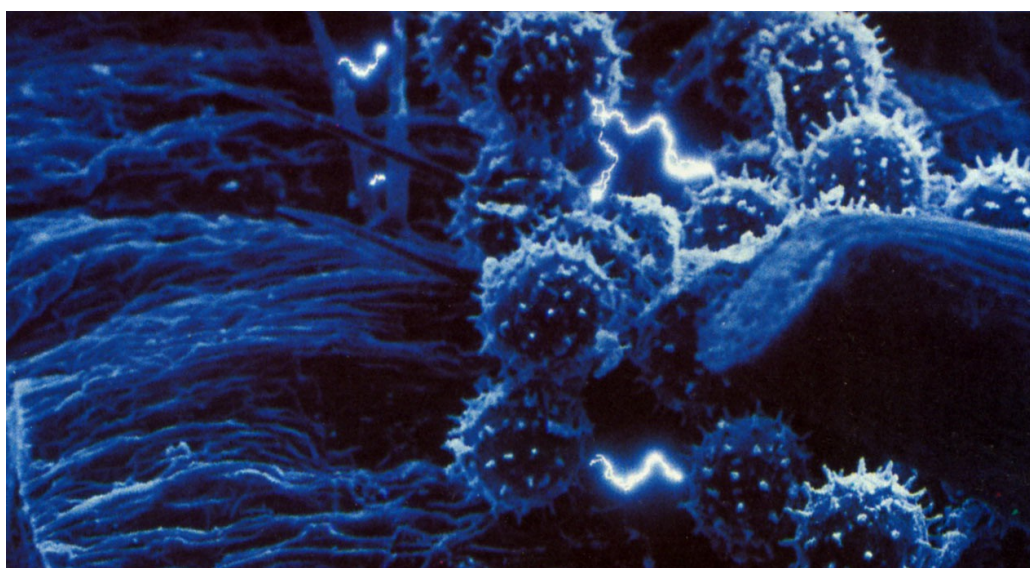
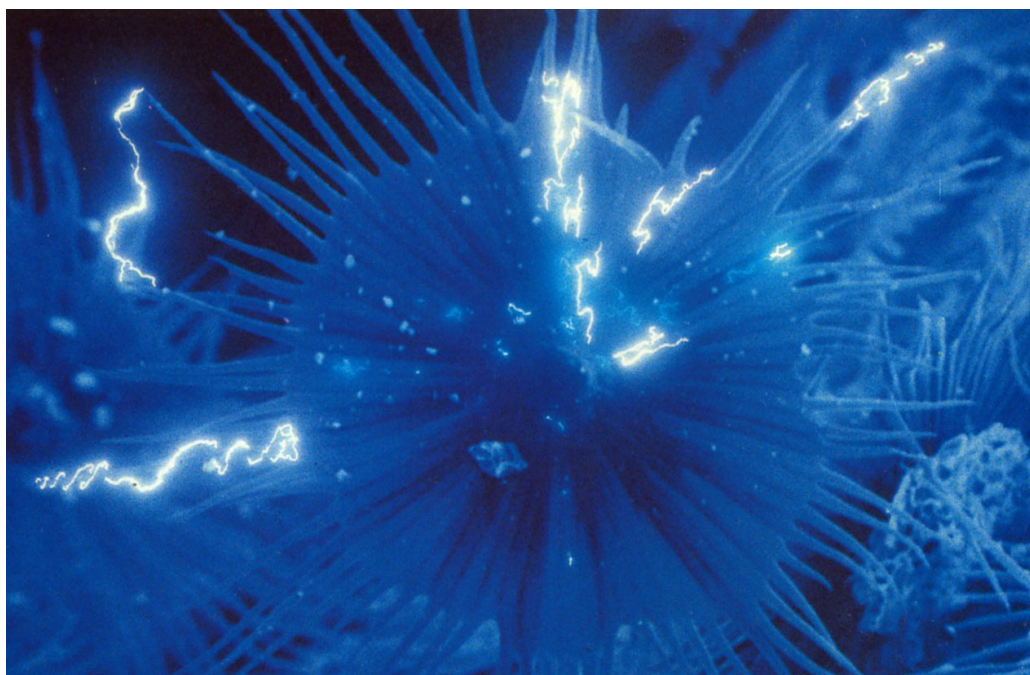
in earnest to create a microscopic representation of an other-dimensional world. Even though the electron microscope was incapable of real movement, Scheele was able to simulate sweeping camera moves by rigging the specimen mount to a motion control unit developed by Bill Tondreau. Thus, by tumbling and turning the specimen, in conjunction with the microscope's built-in zoom capability, a strong sense of movement in depth could be suggested. The system was not without its limitations, however. "Scanning electron microscopes are not made for motion control," Fink continued. "They are made to be tweaked by hand. Their works have little nylon gears and little delicate parts, and they do not react particularly well to being exercised over and over again by a motion control system. By the end of the shoot, John was doing everything he could just to keep the shots going. The work was painfully slow. We tried everything — mouse tongues, liver specimens, fungi of all sorts. Of the things we thought would be successful as specimens, it was amazing how many we did not like. And it would take hours to prepare the specimens, which had to be freeze-dried. You have to suck out all the moisture or the specimen disintegrates — which sometimes happened. Apparently, the ice crystals break it down. Then the move had to be programmed, which was considerably more difficult than a routine motion control model shot."

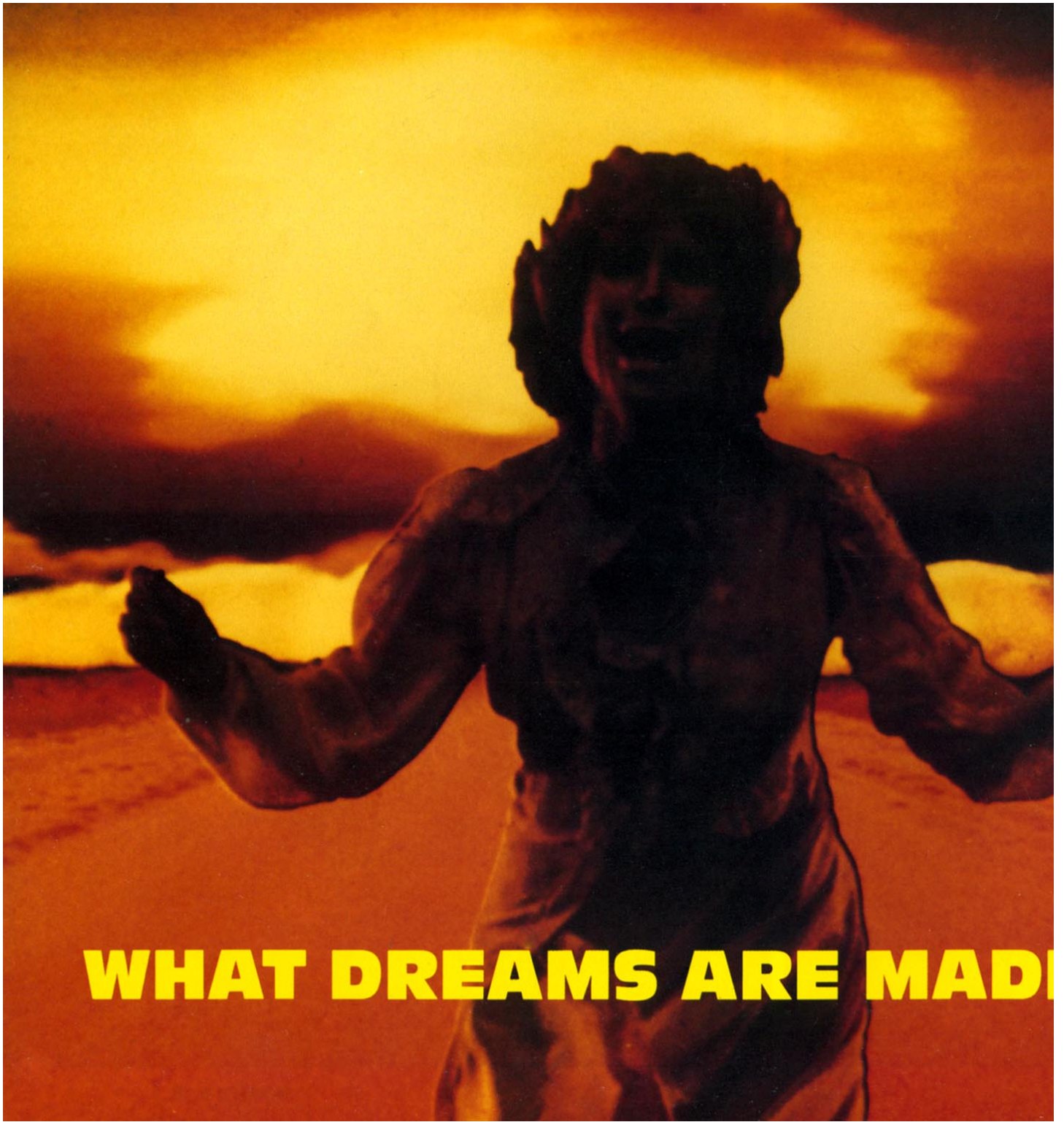
Scheele found the recording of electron microscope footage to be roughly comparable to that of computer generated imagery. Both, for instance, are scanned first onto high-resolution black-and-white monitors — which, in the case of the electron microscope footage, required ninety seconds per frame. Fortunately, however, as with computer animation, the move could first be previewed on a low-resolution monitor in real time. "John programmed most of the shots," Fink continued, "and Mike Beard photographed them, shooting off the high-resolution monitor on color film because color is sturdier. As a result, we got this incredibly highlighted, weird blue image. It would take hours and hours to do a move. Everything had to be done in pieces. We did one move that was 110 frames long, and it was just phenomenal — the only problem was that half of it was out of focus. The electron beams couldn't be kept in focus. Finally, everything worked out."

The scanning electron microscope footage, unique and thoroughly interesting in its own right, would still require doctoring before it could be incorporated into the film. First, the basically monochrome footage needed to be colored in some way. "The only way to get the colors in," said Fink, "was either to animate it or make film elements that could be generated in sizes sufficiently different that you could actually get some kind of color in as if you were doing color separations. We tried the latter and it was a dismal failure. We would put color into

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WHAT DREAMS ARE MADE

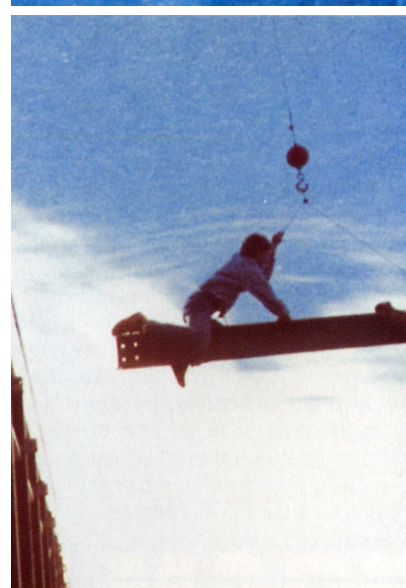
different pieces of film, and was definitely one of the most complicated shots I've ever done."

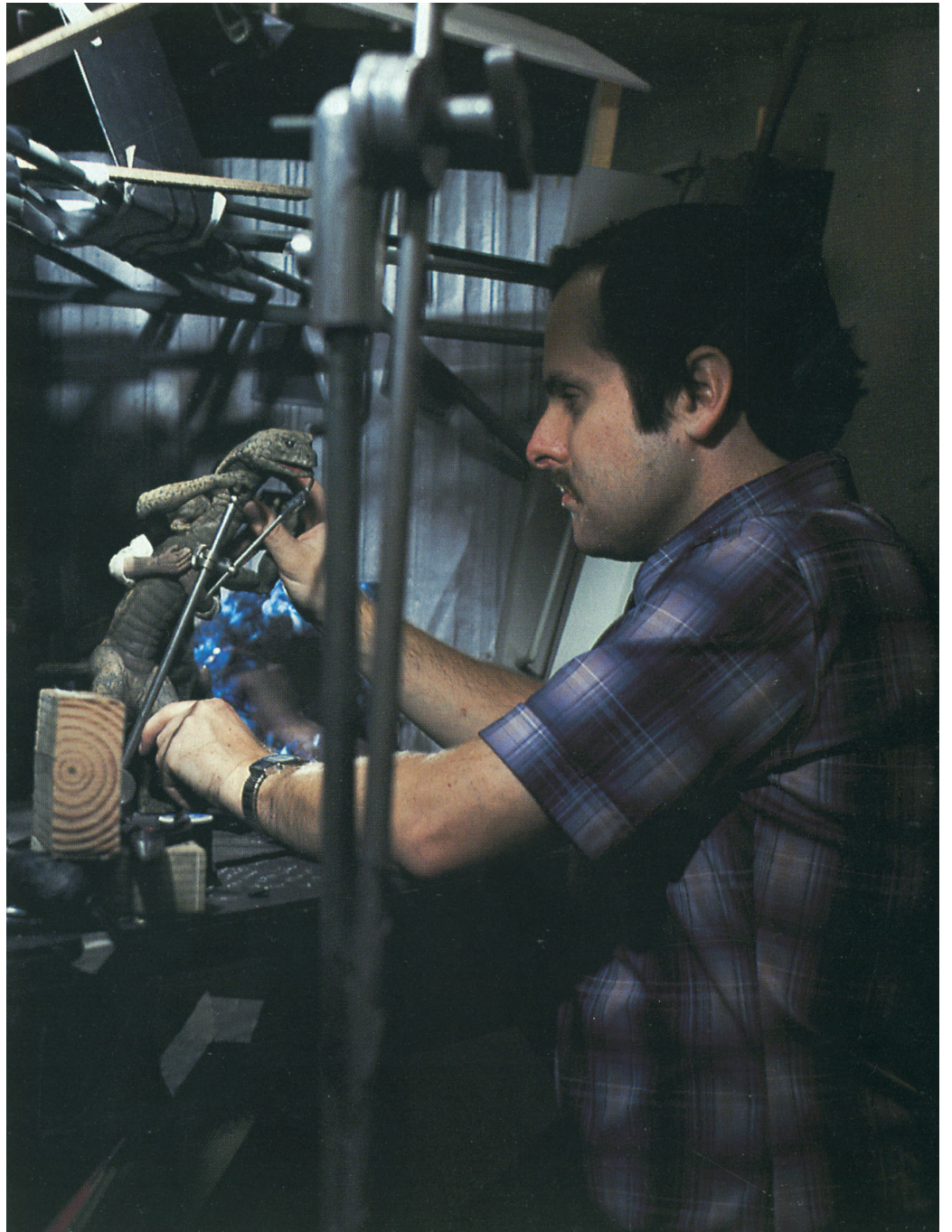
Like the opening nightmare, the next dream sequence also relied heavily on optical effects. In it, Alex experiences the dreamscape for the first time when he enters the dream of a construction worker whose biggest fear is falling off a tall skyscraper. Alex manages to save the man, but falls off a high steel beam himself, plummets down toward earth and wakes up just before hitting the ground. For Kuran, the sequence required two principal effects. First, the fall of Alex was accomplished by filming Dennis Quaid against a blue screen and then optically matting him over background footage taken by an Eyemo camera that was lowered down the side of a building via a cable rig. Second, Kuran had to devise a way to create clouds that could move quickly over the characters' heads to give the otherwise normal environment the feel of being part of a surrealistic dream world.

"When we first talked about doing the sequence," Kuran noted, "we considered filming real clouds in time-lapse. But as I thought more about that, I realized I could end up spending weeks trying to get the right situation of clouds and then learn that they weren't what the producers had in mind. So I started checking into alternatives. First, I tried various stock footage sources, but found that all of their clouds looked the same and were very expensive to buy. To purchase footage for just one shot would have cost something like \$2000; and when I counted up the number of shots needed for the sequence, it became obvious that we could have easily spent half the effects budget just for the clouds." When Kuran approached ILM about purchasing some cloud footage they had done for *Dragonslayer*, friends there suggested that he just film some smoke. "I thought about it and decided to do just that. I started experimenting with dry ice and eventually came up with a look that was different from what I had seen in stock footage — it was more unique and interesting. Once I had established that look, which the producers and director liked, I was able to just shoot dry ice from a variety of different angles to match the angles in the particular shots. The scene itself was filmed against a very bright sky, and that enabled us to pull mattes off the people and the edges of the building so we could easily insert the clouds. So instead of spending weeks filming real clouds, or spending a lot of money buying expensive footage, I just ended up filming dry ice on black velvet."

After Alex successfully helps the construction worker conquer his fear of heights, his next challenge is to help Buddy conquer a monstrous snakeman that continually reappears in his nightmares, kills his father and then comes after him. To make the cobra-like monster, two different approaches were used — a full-scale snakeman suit designed and built by Craig Reardon,

Each of the Dreamscape nightmare sequences was preceded by a tunnel-like stream of imagery created by experimental filmmaker Dennis Pies, who achieved the basic effect by photographing various chemicals in layers on an animation stand. / Visual effects supervisor Peter Kuran added mysterious swirling clouds to an imperiled construction worker's nightmare by matting dry ice vapor into the sky areas. / A young boy's dream of a giant snakeman was brought to life by effects makeup artist Craig Reardon, who constructed a full-body suit for the creature, complete with radio-controlled facial articulations. / Intercut with footage of Reardon's snakeman suit were stop-motion animation scenes created by James Aupperle. / In a miniature reproduction of the live-action set, Aupperle







with Stephen Czerkas — scaled down 1

Reardon began his snakeman sculptu of clay to a body casting of 'snakeman' had earlier worn Reardon's gremlin suit *Movie*. Reardon sculpted the snakeman in section, which included the legs, arms an head and tail. Molds were taken from th was made out of foam latex. To reinfor tion, Reardon lined the human form insic tight cloth suit that bonded with the foai ing process — a technique he had use *Twilight Zone* suit. In addition to the t Reardon also made separate foam rubb fingernails reinforced with acrylic plasti could break through the door in Bud sequence prescribed.

To become the snakeman, Cedar wou body section, put on his gloved hands an piece. Because of the size and weight o Cedar wore a padded helmet-like device a space around his neck and head so cobra head would rest firmly on his shc his head or neck. This helmet, which featured a slip bolt on top so the head down for steadiness. Once inside, Cedar 1 so he could breath, and the back of th

To bring the snakeman head to life, alternate approach to the straight cable commonly used throughout the makeup on, we determined that the snakeman's f have to be extensive because snakes are *have* a lot of expressions. They open t their eyes, but that's about all. We dec and we also decided to try and do it wil operated expressions have a limit on h can be pulled to be effective, and we w some shots where you could conceivably all assembled and with no operators b designed and built the mechanisms insic out the radio control system. Unfortunate that there was a limit on how far the cables. Also, power became a problem t of space inside the head for us to put a and cable mechanisms. We came close that we wanted, but there were still some

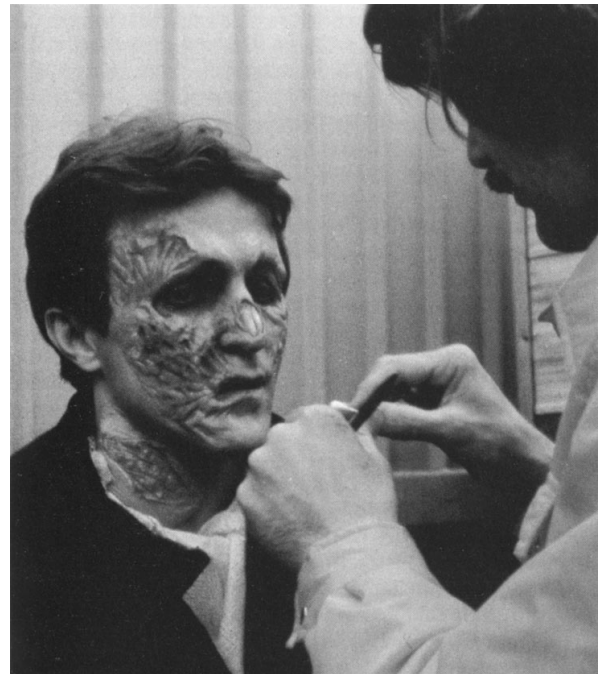


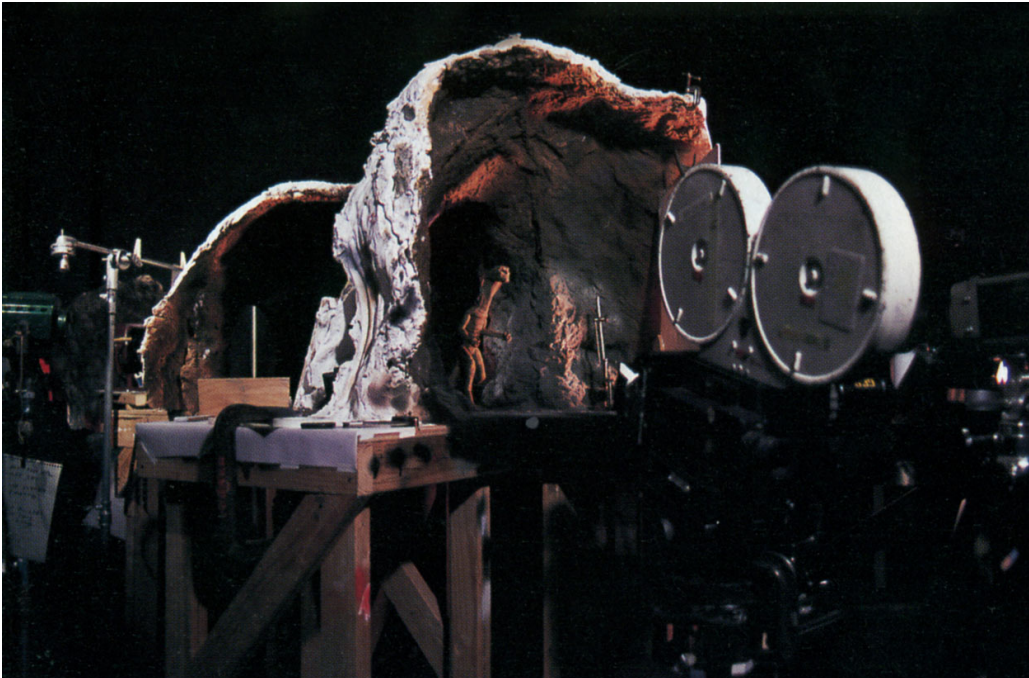
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blades, digs them into the chest of a poli onto the trolley, and pulls out the man moments later, he causes a set of numchi in his hand. For the former effect, Re: arm complete with metallic fingernails the fingertips. For the latter, Kuran int animation to impart a sense of magic

"Originally, they were just going to the numchecks already in his hand, bu to have them materialize instead. First locked-off position, we started with the around as if he were really holding n did this for the camera, an assistant wal the real numchucks to him and then ste We then used a soft cut from the positio and had Chris Casady do some anim dissolve. So it looks like a glowing bit hand and then, as his arm rises up, this real numchucks — and because the anir the dissolve is essentially unnoticeabl

As Alex and the President try to esc they suddenly find themselves in anothe by twelve radiation-altered mutants. 1 looking human zombies a reality. Reard ferent foam rubber masks that could t by extras. All of these masks — featuri damage and radiation burns — were bu hidden zippers up the back. Reardon approach instead of appliance makeup l he and his crew would not have had ti extras on the set. For six mutant childr trolley, however, he did create appliai alter their looks from normal children of an imaginary post-nuclear war wor

For Alex, such nightmarish visions a and he quickly grabs Tommy Ray anc Suddenly, Tommy Ray transforms hir similar to the one in Buddy's dream ex of the psychic hit man. For Reardon, th mation proved to be his most ambi because he and the producers both w new and different from the Rick Baker *London*-style approach that had sub several films. "Instead, I suggested tha ment animation," Reardon explained, " nique used on television to make the Pi In that instance, every change of move is a different little statue. Replacem approach that had been discussed for tr

